

**SEQUENCES FOR IMPROVING THE EFFICIENCY OF SECRETION OF
NON-SECRETED PROTEINS FROM MAMMALIAN AND INSECT CELLS**

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. Patent Application Serial
No. 09/136,421, filed August 20, 1998, ^{NOW USPN 6,037,150} which in turn claims priority to U.S.
Provisional Application Serial No. 60/056,871 filed August 21, 1997, both of
which are incorporated herein by reference in their entirety.

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates to the engineering of heterologous gene
constructs by recombinant DNA techniques for the more efficient processing and
secretion of heterologous genes in mammalian and insect cells. Particularly the
present invention relates to the use of secretion competent polypeptides linked in
frame with a non-secretion competent polypeptide to direct the secretion of the
non-secretion competent polypeptide.

DESCRIPTION OF THE RELATED ART

Recombinant polypeptides for medical, research and veterinary
applications are produced using a wide variety of genetically engineered
organisms that include transgenic animals (eg. cows, goats) transgenic plants (eg.
canola) recombinant viruses (eg. baculoviruses) and transformed prokaryotic cells
(eg. bacteria) and eukaryotic cells (eg. yeast and animal cells) in culture.